

NIST Databases and Resources: Hidden Gems

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2019 Federal Depository Library Conference

October 21, 2019

Presentation Outline

- Introduction to NIST
- Information Services Office (aka the NIST Research Library)
- Popular NIST databases
 - NIST Chemistry WebBook
 - NIST Digital Library of Mathematical Functions (DLMF)
 - NIST on GitHub
 - World Trade Center Investigation
 - National Software Reference Library (NSRL)
 - NIST Science Data Portal
 - NIST Digital Archives (NDA)
 - NIST Publications in govinfo

National Institute of Standards and Technology (NIST)

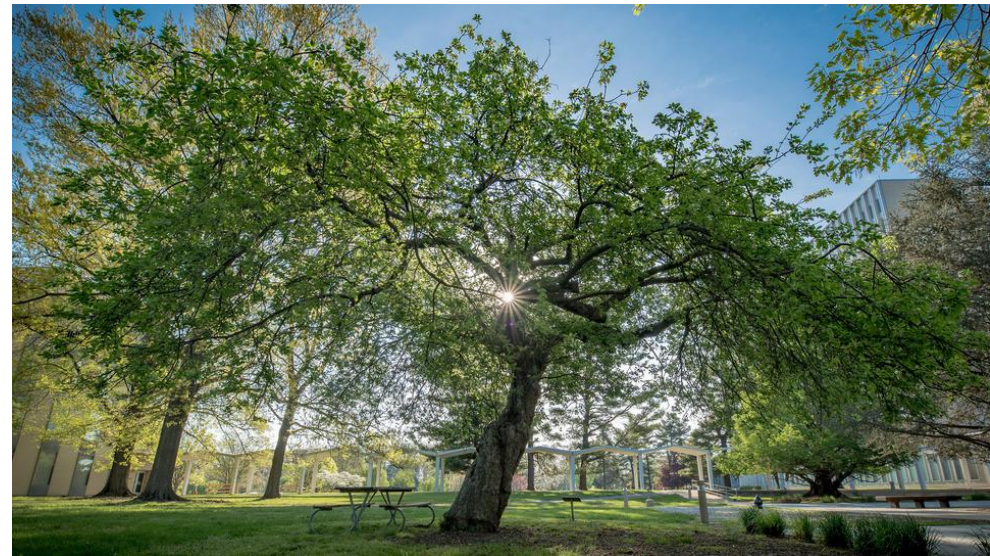
- Non-regulatory federal agency made up of about 3,000 science and technology researchers
- NIST promotes U.S. innovation and industrial competitiveness by advancing measurement science, standards, and technology
- Home of five Nobel Laureates
- Home of the atomic clock
- Gaithersburg/Boulder campuses



Credit: Copyright Robert Rathe

Information Services Office

- Supports and enhances the research activities of the NIST scientific community
- Also known as the NIST Research Library
- Staff of 20, plus contractors
- Teams
 - Museum & Archives
 - Outreach & Marketing
 - Resources, Access, Data



Credit: Stoughton/NIST

Highly Used NIST Data and Information

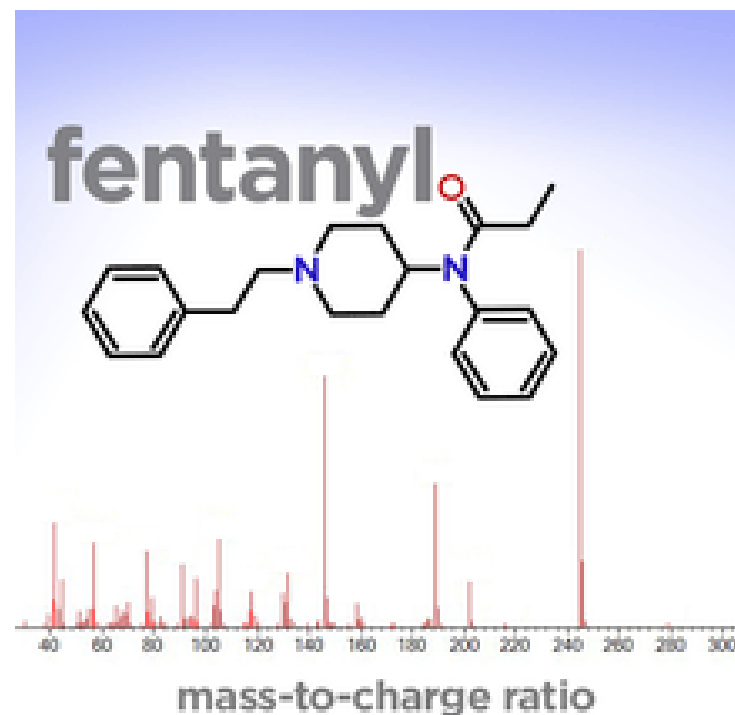
- [Atomic Spectra Database](#)
- [Ballistics Toolmark](#)
- [Chemistry WebBook](#)
- [Digital Library of Mathematical Functions](#)
- [Fire Research](#)
- [Materials Genome Initiative](#)
- [National Vulnerability Database](#)
- [NIST GitHub Repository](#)
- [Physical Reference Data](#)
- [Standard Reference Data \(SRDs\)](#)
- [Time](#)
- [World Trade Center Disaster Investigation Material](#)

NIST Chemistry WebBook

- Provides access to data compiled and distributed by NIST under the Standard Reference Data Program.
- Contains:
 - Thermochemical data for over 7000 organic and small inorganic compounds
 - IR spectra for over 16,000 compounds
 - Mass spectra for over 33,000 compounds
 - UV/Vis spectra for over 1600 compounds
 - Gas chromatography data for over 27,000 compounds
 - Electronic and vibrational spectra for over 5000 compounds
 - Constants of diatomic molecules (spectroscopic data) for over 600 compounds
 - Ion energetics data for over 16,000 compounds
 - Thermophysical property data for 74 fluids

NIST Chemistry WebBook

- Search options
 - Name
 - Formula
 - IUPAC Identifier
 - CAS Registry Number
 - Other options
 - Reaction
 - Author
 - Structure





Search ▾

NIST Data ▾

About ▾

NIST Chemistry WebBook

NIST Standard Reference Database Number 69

Last update to data: 2018

DOI: <https://doi.org/10.18434/T4D303>

View: [Search Options](#), [Models and Tools](#), [Special Data Collections](#), [Documentation](#), [Changes](#), [Notes](#)

▶ Credits

NIST reserves the right to charge for access to this database in the future.

Search Options

General Searches

- [Formula](#)
- [Name](#)
- [IUPAC identifier](#)

Physical Property Based Searches

- [Ion energetics properties](#)
- [Vibrational and electronic energies](#)
- [Molecular weight](#)

<https://webbook.nist.gov/chemistry/>

NIST Digital Library of Mathematical Functions

- Online project at NIST to develop a major resource of mathematical reference data for special functions and their applications
- Complete revision of Abramowitz's and Stegun's *Handbook of Mathematical Functions* (AMS 55)
- Published online in 2010

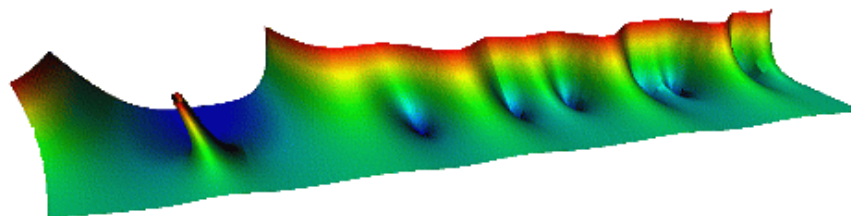
*D*igital
*L*ibrary of
*M*athematical
*F*unctions

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NIST
National Institute of
Standards and Technology
U.S. Department of Commerce



NIST Digital Library of Mathematical Functions

Project News

2019-09-15 [DLMF Update; Version 1.0.24](#)

2019-06-15 [DLMF Update; Version 1.0.23](#)

2019-03-15 [DLMF Update; Version 1.0.22](#)

2018-12-15 [DLMF Update; Version 1.0.21](#)

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| 1 Algebraic and Analytic Methods | 23 Weierstrass Elliptic and Modular Functions |
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| 3 Numerical Methods | 25 Zeta and Related Functions |
| 4 Elementary Functions | 26 Combinatorial Analysis |
| 5 Gamma Function | 27 Functions of Number Theory |
| 6 Exponential, Logarithmic, Sine, and Cosine Integrals | 28 Mathieu Functions and Hill's Equation |


<https://dlmf.nist.gov/>

NIST on GitHub

The screenshot shows the GitHub profile page for the National Institute of Standards and Technology (NIST). The header includes the GitHub logo, a search bar, and navigation links for Pull requests, Issues, Marketplace, and Explore. The profile information section displays the NIST logo, the organization name, its affiliation with the Department of Commerce, location in Gaithersburg, Md., and website URL. Below this, statistics for Repositories (620), Packages, People (42), and Projects (1) are shown. The 'Pinned repositories' section features five repository cards: 'fipy' (Python, 205 stars, 84 forks), 'mobile-threat-catalogue' (HTML, 94 stars, 15 forks), 'OSCAL' (XSLT, 131 stars, 40 forks), 'jsip' (Java, 128 stars, 64 forks), and 'trec_eval' (C, 89 stars, 27 forks). At the bottom, there is a search bar for repositories and filters for Type and Language.

<https://github.com/usnistgov>

World Trade Center Investigation

NIST Search NIST  **NIST MENU**

Resilience

DISASTER & FAILURE STUDIES

About the Disaster and Failure Studies Program

Recent Activities

Disaster & Failure Studies Data Repository +

FAQs and Presentations

Hurricane Maria

National Construction Safety Team (NCST) +

Studies by Hazard Types +

Impacts and Recommendations

World Trade Center Disaster Study -

About the Investigation

Study FAQs

Investigation Meetings and

WTC Disaster Study


On August 21, 2002, with funding from the U.S. Congress through FEMA, the National Institute of Standards and Technology (NIST) announced its building and fire safety investigation of the World Trade Center (WTC) disaster that occurred on September 11, 2001. The NIST WTC Investigation was conducted under the authority of the [National Construction Safety Team Act](#).

The goals of the investigation of the WTC disaster were:

- To investigate the building construction, the materials used, and the technical conditions that contributed to the outcome of the WTC disaster.
- To serve as the basis for: improvements in the way buildings are designed, constructed, maintained, and used; improved tools and guidance for industry and safety officials; recommended revisions to current codes, standards, and practices; and improved public safety.

The specific objectives were:


- Determine why and how WTC 1 and WTC 2 collapsed following the initial impacts of the aircraft and why and how WTC 7 collapsed;



WTC Fire Experiment #6 showing room completely enveloped in flames and showing failure of two glass panels on left.

<https://www.nist.gov/topics/disaster-failure-studies/world-trade-center-disaster-study>

National Software Reference Library

NIST Search NIST  **NIST MENU**

Information Technology Laboratory / Software and Systems Division

SOFTWARE QUALITY GROUP

National Software Reference Library (NSRL)

- Curated Kaspersky Hash Set - 2017
- About the NSRL +
- NSRL Download +
- NSRL Subprojects +
- Technical Information +
- Subscribe +
- Contact Information
- NSRL Partner Projects
- Acknowledgements

National Software Reference Library (NSRL)

Welcome to the National Software Reference Library (NSRL) Project Web Site.

This project is supported by the U.S. Department of Homeland Security, federal, state, and local law enforcement, and the National Institute of Standards and Technology (NIST) to promote efficient and effective use of computer technology in the investigation of crimes involving computers. Numerous other sponsoring organizations from law enforcement, government, and industry are providing resources to accomplish these goals, in particular the FBI who provided the major impetus for creating the NSRL out of their ACES program.

The National Software Reference Library (NSRL) is designed to collect software from various sources and incorporate file profiles computed from this software into a Reference Data Set (RDS) of information. The RDS can be used by law enforcement, government, and industry organizations to review files on a computer by matching file profiles in the RDS. This will help alleviate much of the effort involved in determining which files are important as evidence on computers or file systems that have been seized as part of criminal investigations.

The RDS is a collection of digital signatures of known, traceable software applications. There are application hash values in the hash set which may be considered malicious, i.e. steganography tools and hacking scripts. There are no hash values of illicit data, i.e. child abuse images. The National Software Reference Library is a project in [Software and Systems Division](#) supported by [NIST Special Programs Office](#).

 [Forensic Science](#), [Digital evidence](#), [Information Technology](#) and [Software research](#)

<https://www.nist.gov/software-quality-group/national-software-reference-library-nsrl>

NIST Science Data Portal

The screenshot shows the NIST Science Data Portal homepage. At the top left is the NIST logo and 'SCIENCE DATA PORTAL 1.2.0'. A navigation bar includes 'Key Datasets', 'Standard Reference Data (SRDs)', 'Developer', 'About', and 'Find Papers'. A 'Queries' badge with '0' is in the top right. The main banner features 'NIST Data Discovery' and the tagline 'Explore data, tools, and resources for Science, Engineering, Technology and more'. A search bar contains 'Kinetics database' and a dropdown menu set to 'ALL RESEARCH'. A 'Search' button and a link to 'Advanced Search' are also present. Below the search bar, examples of search terms are listed: 'Kinetics database', 'Gallium', 'SRD 101', 'XPDB', and 'Interatomic Potentials'. The 'FEATURED DATA DOMAINS' section contains eight buttons: INFORMATION TECHNOLOGY, MATHEMATICS AND STATISTICS, MANUFACTURING, FORENSICS, MATERIALS, PHYSICS AND NEUTRON, ADVANCED COMMUNICATIONS, and CHEMISTRY. The footer includes the NIST logo, 'National Institute of Standards and Technology U.S. Department of Commerce', the headquarters address (100 Bureau Drive, Gaithersburg, MD 20899), and social media icons for Twitter, Facebook, LinkedIn, Instagram, YouTube, RSS, and Email.

<https://data.nist.gov/sdp/>

NIST Science Data Portal

The screenshot shows the NIST Science Data Portal interface. At the top, the NIST logo and 'SCIENCE DATA PORTAL 1.2.0' are visible. A navigation bar includes links for 'Key Datasets', 'Standard Reference Data (SRDs)', 'Developer', 'About', and 'Find Papers', along with a 'Queries' indicator showing 0. A search bar contains the text 'Information Technology' and a 'Search' button. Below the search bar, there are example search terms: 'Kinetics database', 'Gallium', 'SRD 101', 'XPDB', and 'Interatomic Potentials'. A 'Filters' sidebar on the left allows filtering by 'Resource Type' (Public Data Resource: 20), 'Research Topics' (Information Technology: 20, Manufacturing: 6, Advanced Communications: 3, Mathematics and Statistics: 1, Chemistry: 1), and 'Record has' (Access Page: 8, Data File: 7, Subcollection: 2). The main content area displays '20 records found' and lists several records:


- National Vulnerability Database**: Security automation reference data is currently housed within the NVD. The NVD is the U.S. Government repository of security automation data based on security automation specifications. This data provides a standards-based foundation for the automation of software asset...[Read more](#)
Subject Keywords: CVE, CVSS, SCAP, 800-53, Vulnerability, NVD, Checklists
[Visit Home Page](#)
- Computer Code for Tennessee Eastman Industrial Wireless Systems Performance Evaluation**: This computer code contains the Tennessee Eastman (TESIM) chemical process model to be simulated using hardware-based simulation approaches. The code is optimized for wireless system integration as a part of the NIST Industrial Wireless project. This code allows for in...[Read more](#)
Subject Keywords: Factory Simulation, chemical process simulation, factory operations, wireless performance evaluation, cyber-se...[Read more](#)
[Visit Home Page](#)
- Intel Edison wireless latency and reliability computing code**: This software provides a framework to generate events with both application payload identification and timestamps. Events information is logged at each producer and consumer. The logs can be used to derive latency and reliability metrics for cyber-physical systems exp...[Read more](#)
Subject Keywords: IoT, Wireless, RF, Manufacturing, Node.js
[Visit Home Page](#)
- Baseline Tailor**: Baseline Tailor is a software tool for using the United States government's Cybersecurity Framework and for tailoring the NIST Special Publication (SP) 800-53 security controls. Baseline Tailor generates output in an Extensible Markup Language (XML) format capturing a u...[Read more](#)
Subject Keywords: cybersecurity framework, security control, framework profile, manufacturing profile, tailored baseline, indust...[Read more](#)
[Visit Home Page](#)
- Color FERET Database**: The DOD Counterdrug Technology Program sponsored the Facial Recognition Technology (FERET) program and development of the FERET database. The National Institute of Standards and Technology (NIST) is serving as Technical Agent for distribution of the FERET database. The ...[Read more](#)

<https://data.nist.gov/sdp/>

NIST Science Data Portal

NIST PUBLIC DATA REPOSITORY 1.2.0 About | Search | Cart ⁰

Public Data Resource
NIST SAMATE Software Assurance Reference Dataset


Contact: [Vadim Okun](#) 
Identifier: <ark:/88434/mds00wnngt>
Last modified: **2015-11-18** [Visit Home Page](#)



Description



This dataset provides the NIST Software Assurance Metrics And Tool Evaluation (SAMATE) Software Assurance Reference Dataset (SARD) - a set of programs with known security flaws. This will allow end users to evaluate tools and tool developers to test their methods.

Research Topics: Information Technology: Software research: Software assurance , Information Technology: Software research: Software testing
Subject Keywords: test suite, software assurance, software testing, static analysis, security, weakness, bug, defect, flaw, vulnerability

Data Access

 These data are public. For more information, please visit the [home page](#).

Files   ⁰ Click on the file row in the table below to view more details. Total No. files: 1

Name	Media Type	Size	Status
sard_archive.zip	application/zip		 

- Go To ..**
- [Description](#)
- [Data Access](#)
- Record Details**
- [View Metadata](#)
- [Export JSON](#)
- Use**
- [Citation](#)
- [Fair Use Statement](#)
- Find**
- [Similar Resources](#)
- [Resources by Authors](#)

<https://data.nist.gov/sdp/>

NIST Digital Archives (NDA)

NIST Digital Archives

Digital Collections of the
National Institute of Standards and Technology

Advanced Search

These archives showcase publications, historic photos, and museum artifacts from the National Institute of Standards and Technology (NIST) Archives and the NIST Museum.

[Search PHOTOS](#)


[Search NIST PUBLICATIONS](#)

[Search NIST MUSEUM ARTIFACTS](#)

Founded in 1901, NIST is a non-regulatory federal agency within the U.S. Department of Commerce. NIST's mission is to promote U.S. innovation and industrial competitiveness by advancing measurement science, standards, and technology in ways that enhance economic security and improve our quality of life.


Journal of Research of NIST and Predecessor Publications

The NIST Journal of Research and its predecessor publications in the early days of the National Bureau of Standards, results of research in science and technology from the National Bureau of Standards were reported in the Scientific Papers. The first 14 volumes of the Scientific Papers were issued as the Bulletin of the Bureau of Standards (1904-1919). Volumes 15-22 of these papers were issued as Scientific Paper...




NBS-NIST Technical Series Publications

This collection contains select NIST Technical Series publications written by or for NIST and published by the NIST Research Library. They are technical reports, recommendations, practice guides, industry handbooks, and other similar technical documents intended for external distribution. The publications are organized into periodical and nonperiodical series.




NBS-NIST History Volumes

This collection includes history books about of the National Institute of Standards and Technology (NIST), formerly the National Bureau of Standards (NBS). The collection includes three books: Measures for Progress, A Unique Institution, and Responding to National Needs. These books cover the history of the agency from its creation in 1901 through 1993, with supplemental information through 2009. These volumes...




A Century of Excellence

Published in 2001, A Century of Excellence in Measurements, Standards, and Technology: A Chronicle of Selected NBS/NIST Publications, 1901-2000 (SP955) commemorates the centennial of the National Institute of Standards and Technology (NIST) by presenting brief accounts of selected classic NIST publications. These publications illustrate the rich history of the Institute's scientific and technical accomplishments...




Historic Images

This collection of images is comprised of many historical photographic collections housed in the National Institute of Standards and Technology (NIST) Archives located on the NIST campus in Gaithersburg, MD. The images provide a rich visual history of NIST and its predecessor the National Bureau of Standards (NBS). When available, descriptions of the images are provided. However, many images...



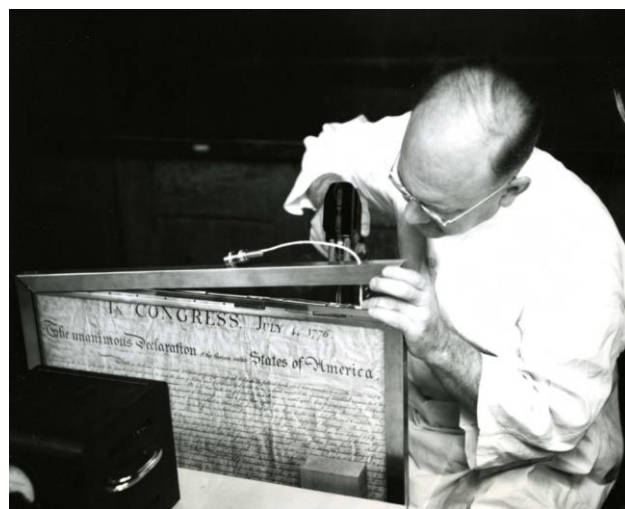
NBS Extracurricular Activities

The National Bureau of Standards (NBS) sponsored many extracurricular activities for its staff and researchers. This collection documents activities such as annual picnics and field days between the 1930s and 1980s.



<https://www.nist.gov/digitalarchives>

NIST Historic Photographs



<https://www.nist.gov/digitalarchives>

NIST Oral Histories



Audio File

Fire Research Program at NBS

Oral history interview of Fire Research Program at NBS, August 3, 1988 / interviewees include Karma Beal Alexander Robertson, Harry Shoub, Daniel Gross, E. Carroll Creitz, Marjorie Sandholzer, Willi participated in – burnout studies, resistance of concretes to jet engine exhaust, Air Force prc 1988-08-03



Fox, Margaret

Oral History Interview of Margaret Fox on April 13, 1983 / with James Ross
Miss Margaret Fox discusses her work in the computer group at NBS during the 1950s. She t; First Computer Conference in Philadelphia in 1951 and the first international conference in Pa 1983-04-13



Gadzuk, J. William

Oral history interview of J. William (Bill) Gadzuk, January 27, 2015/ [persons present]: Cedric
Oral history interview of J. William (Bill) Gadzuk, conducted on Tuesday, January 27, 2015 at Bureau of Standards, for 45 years, first doing research in surface science, surface physics an 2015-01-27



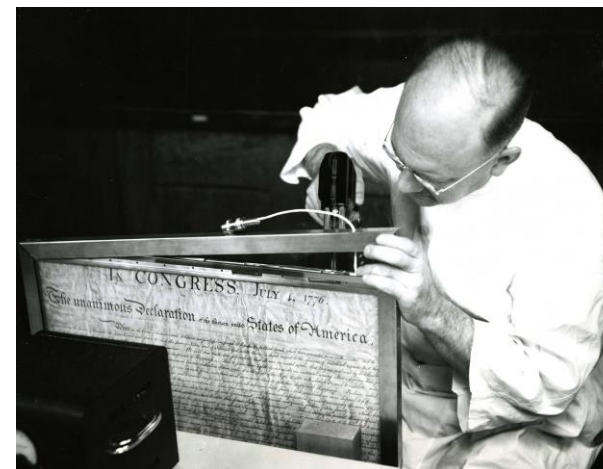
Gary, Thomas

Oral history interview of Thomas Gary, November 4, 2005 / with David Lide, Hans Oser, Harri
Oral history interview of Thomas Gary, November 4, 2005. Thomas Gary came to the Nationa of the Metallurgy Division. He discusses the jobs he had at the National Institute of Standards 2005-11-04



Gebbie, Katharine

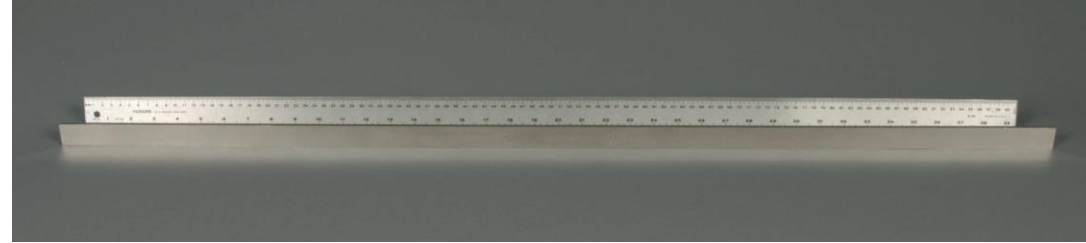
Oral history interview of Katharine Gebbie, May 12, 1987 / by Karma Beal
Katharine Gebbie discusses the JILA Program (a joint institute between NBS and the Universi working environment of JILA - the NBS components, the University personnel, the grad stude 1987-05-12



NIST Museum Artifacts



Riefler Clock



Arago Platinum Meter



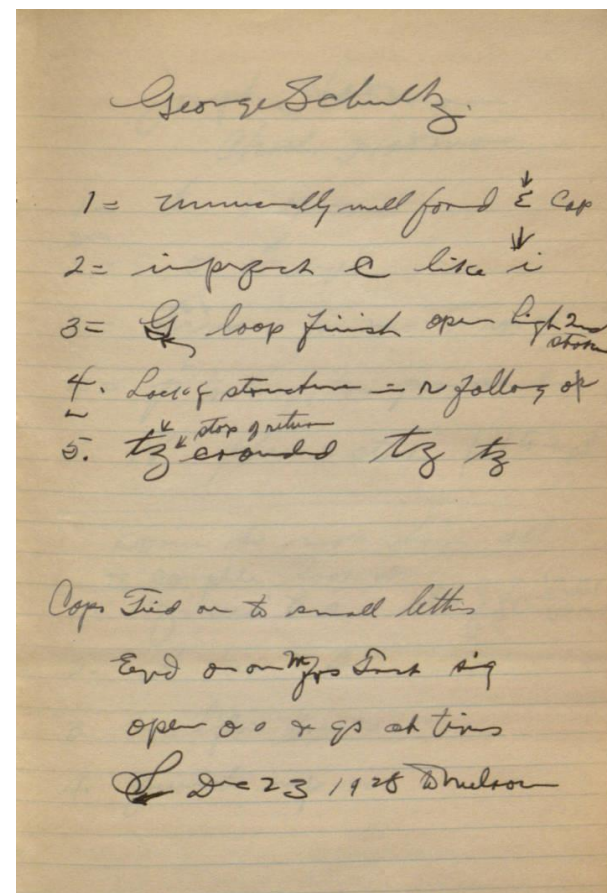
Luminous Script Signs

<https://www.nist.gov/digitalarchives>

Special Collections on the NDA



Silver Bridge Collapse



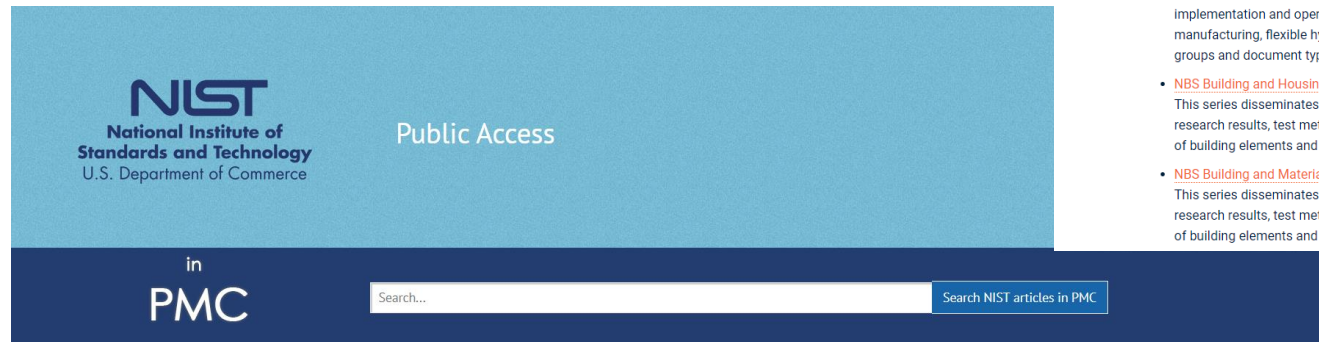
George Schulz

- 1 = unimally well found \downarrow cap
- 2 = impact & like \downarrow i
- 3 = \downarrow loop finish open right \downarrow ^{2nd} _{atom}
4. Loss of structure in a falling of
5. t_3 ^{stop of return} \downarrow t_3 \downarrow t_3

Caps Tied on to small letters
Evid on on t_3 Dist sig
open & o \downarrow t_3 at times
L Dec 23 1928 D. Nelson

William Souder Notebooks

NIST Publications in PMC and govinfo



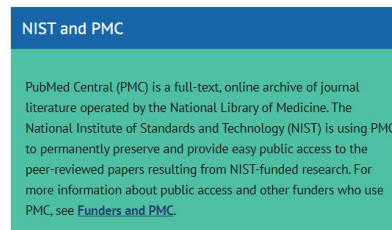
[Browse all NIST articles in PMC](#)

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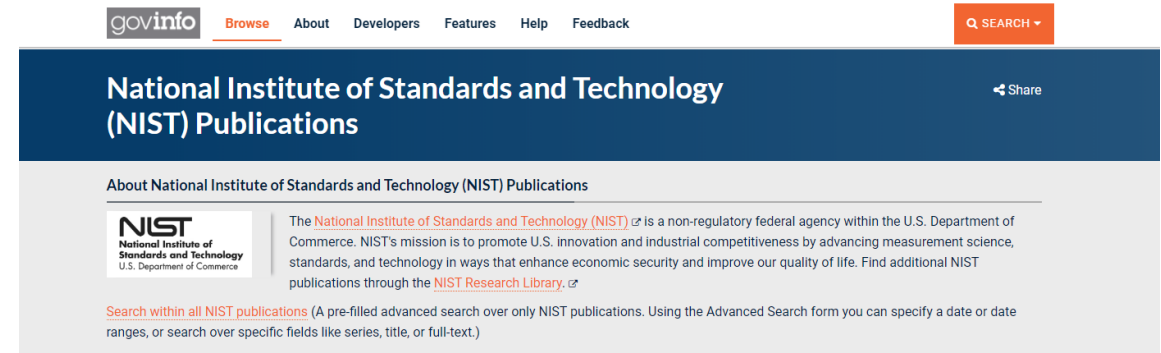
This database includes peer-reviewed articles written by the staff of the National Institute of Standards and Technology that were published on or after October 1, 2015. Articles cover the full range of NIST work on topics such as quantum physics, materials research, analytical chemistry, computer security, manufacturing engineering, structural engineering, fire science, forensic science, nanotechnology, and biotechnology.

[Search for articles from the NIST website \(including articles published before 10/1/15 that may not be in PMC\)](#)

[About NIST | NIST's Public Access Plan](#)



<https://www.ncbi.nlm.nih.gov/pmc/funder/nist/>



Browse National Institute of Standards and Technology (NIST) Publications

All NIST Publications

- [Advanced Manufacturing Series \(AMS\)](#)

This series consists of reports, guides, recommendations, specifications, use cases, and data management methods related to the design, planning, implementation and operation of advanced manufacturing. Topics cover, but are not limited to, additive manufacturing, advanced composites, digital manufacturing, flexible hybrid electronics, integrated photonics, lightweight metals, and smart manufacturing. AMS is divided into subseries for specific groups and document types.

- [NBS Building and Housing, 1922-1932](#)

This series disseminates technical information developed at NIST on building materials, components, systems, and whole structures. The series presents research results, test methods, and performance criteria related to the structural and environmental functions and the durability and safety characteristics of building elements and systems.

- [NBS Building and Materials Structures, 1938-1959](#)

This series disseminates technical information developed at NIST on building materials, components, systems, and whole structures. The series presents research results, test methods, and performance criteria related to the structural and environmental functions and the durability and safety characteristics of building elements and systems.

<https://www.govinfo.gov/collection/nist>

Peer-Reviewed Publications in PMC

A Century of WWV

Glenn K. Nelson
National Institute of Standards and Technology, Radio Station WWV,
Fort Collins, CO 80524, USA

<https://www.nist.gov>

WWV was established as a radio station on October 1, 1919, with the issuance of the call letters by the U.S. Department of Commerce. This paper commemorates the centennial of the station's establishment and its role in the history of radio time dissemination and frequency calibration.

Key words: broadcasting; frequency; radio; standards; time

Accepted: September 6, 2019

Published: September 26, 2019

<https://doi.org/10.6028/jres.124.02>

1. Introduction

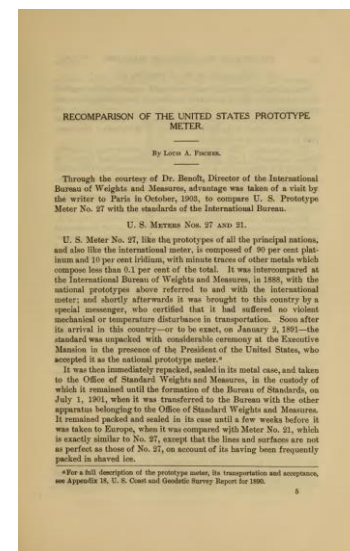
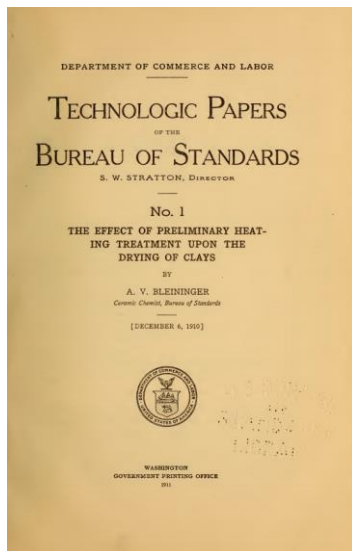
WWV is the high-frequency radio broadcast service that disseminates time and frequency information from the National Institute of Standards and Technology (NIST), part of the U.S. Department of Commerce. WWV has been performing this service since the early 1920s, and, in 2019, it is celebrating the 100th anniversary of the issuance of its call sign.

2. Radio Pioneers

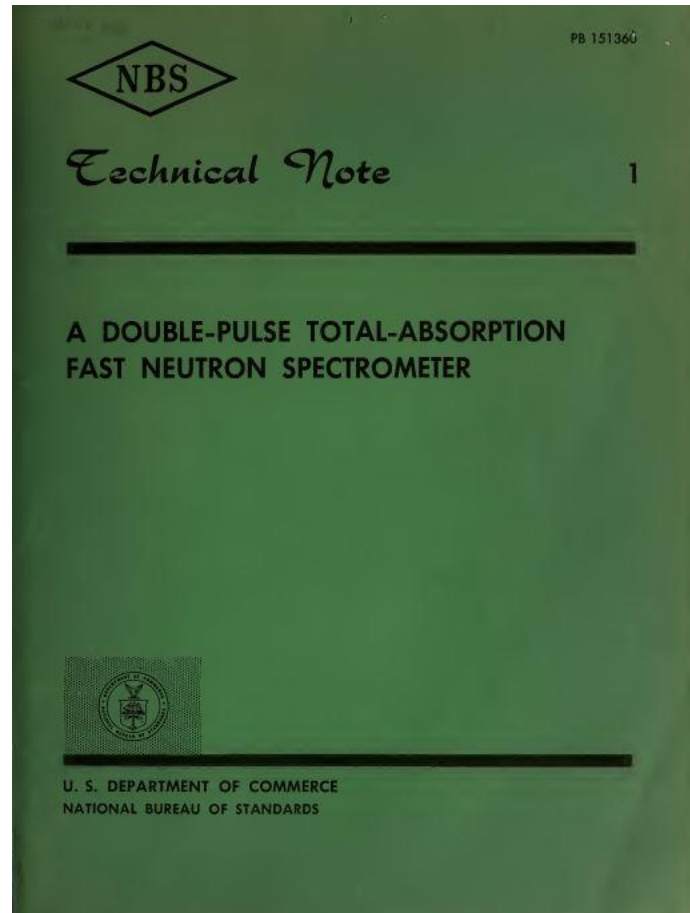
Other radio transmission pioneers WWV by decades. Guglielmo Marconi and others were conducting radio research in the late 1890s, and in 1901 Marconi claimed to have received a message sent across the Atlantic Ocean, the letter "O" in telegraphic code [1]. Radio was called "wireless telegraphy" at those days and was, at that time, considered a novel and exciting technology. However, these transmissions were usually not intended for a wide audience, in fact, in an attempt to establish a monopoly, for a time, the Marconi Company would not divulge or disseminate enough that did not originate from Marconi-owned apparatus [2]. The term "broadcasting" was not used to describe these point-to-point transmissions, or to refer back to a broadcast serving by flagging it by hand across the field, without regard for return or form.

The U.S. Navy was one of the early adopters of this new technology, recognizing the transmission advantage radio brought to communication from land to ships and from ship to ship. Admiral George Dewey noted in 1906, "This form of signal is an out-of-sight-of-eye-of-light, and beyond the sound of guns, the electric wave, projected through space, invisible and inaudible, can alone convey the desired message" [3]. The Navy established a network of radio-telegraphing facilities along both coasts of the United States and on numerous overseas bases during the first two decades of the twentieth century. Pursuant to this discussion, the Navy also established the first radio time service in the United States, the first primary discussion, with the call sign NAA, was built in 1912 across the Potomac from Washington, D.C., to Arlington, Virginia. The signal from the station, with its three distinctive tones, was often referred to as

1
How to cite this article:
Nelson, G. K. (2019). A Century of WWV.
/ <https://doi.org/10.6028/jres.124.02>



NIST Technical Series Publications



- First published in 1902
- Comprised of 92 series
- Approximately 28,000 publications in total (24,000 digitized)
- Still publishing today
- Deposited into govinfo as preservation repository

<https://doi.org/10.6028/NBS.TN.1>

National Institute of Standards and Technology (NIST) Publications

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About National Institute of Standards and Technology (NIST) Publications



The [National Institute of Standards and Technology \(NIST\)](#) is a non-regulatory federal agency within the U.S. Department of Commerce. NIST's mission is to promote U.S. innovation and industrial competitiveness by advancing measurement science, standards, and technology in ways that enhance economic security and improve our quality of life. Find additional NIST publications through the [NIST Research Library](#).

[Search within all NIST publications](#) (A pre-filled advanced search over only NIST publications. Using the Advanced Search form you can specify a date or date ranges, or search over specific fields like series, title, or full-text.)

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- [Advanced Manufacturing Series \(AMS\)](#)
This series consists of reports, guides, recommendations, specifications, use cases, and data management methods related to the design, planning, implementation and operation of advanced manufacturing. Topics cover, but are not limited to, additive manufacturing, advanced composites, digital manufacturing, flexible hybrid electronics, integrated photonics, lightweight metals, and smart manufacturing. AMS is divided into subseries for specific groups and document types.
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This series disseminates technical information developed at NIST on building materials, components, systems, and whole structures. The series presents research results, test methods, and performance criteria related to the structural and environmental functions and the durability and safety characteristics of building elements and systems.
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This series disseminates technical information developed at NIST on building materials, components, systems, and whole structures. The series presents research results, test methods, and performance criteria related to the structural and environmental functions and the durability and safety characteristics of building elements and systems.

<https://www.govinfo.gov/collection/nist>

Search

Advanced

Citation

governmentauthor:(National Institute of Standards and Technology (NIST))

SEARCH

 Search Within Results

Refine Your Search

Collection 12 | count Other (12656)Date Published date | count 1980 (378) 1979 (373) 1976 (372) 1973 (363) 1978 (346)[See More](#)

Government Author

 Commerce Department (12656) National Institute of Standards and Technology (NIST) (12656)

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Previous **1** 2 3 4 ... 1265 1266 Next

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1. **Simulation and analysis plan to evaluate the impact of CO mitigation requirements for portable generators***Commerce Department. National Institute of Standards and Technology. 2019.*

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